

13 [0031] Modem board 105 and/or processor 30 may be configured to allow use of the homeowner's existing telephone line and include an override or "barg-in" capability. For example, if the telephone line is being used by the alarm panel and the homeowner picks up the telephone receiver, any transmission to the service center is stopped and the homeowner may use the telephone. The transmission from the alarm panel to the central computing unit will then be repeated at a later time when the homeowner is not using the telephone. Also, if the homeowner is using the telephone, the alarm panel will not interrupt the call during periodic downloads to the service center, but instead wait for an open line. The transmission of information from the alarm panel to the service center allows the homeowner to place a telephone call in an emergency, and also eliminates the need for the homeowner to provide a second telephone line to implement the remote monitoring capabilities of the system.

In the Claims:

✓ Please rewrite claims 1, 2, 5, 6, 7, and 11, and add new claim 22 as follows. All pending claims are reproduced below for the Examiner's convenience.

24 cont. 1. (Amended) A method for remotely monitoring for repair a plurality of grinder pump stations at a plurality of different first locations, the method comprising:
obtaining data regarding the plurality of grinder pump stations at the first locations;
transferring the data from the first locations via a communications network to a central computing unit at a second location different from the first locations; and

at least one of a) wherein the data comprises data regarding maintenance warnings for the plurality of grinder pump stations, and b) wherein the data comprises data regarding the operation of the plurality of grinder pump stations and further comprising determining, at the central computing unit maintenance warnings for the plurality of grinder pump stations.

2. (Amended) The method of claim 1 wherein the transferring comprises accessing the data at the first locations using the central computing unit.

3. The method of claim 1 wherein the transferring comprises automatically transmitting the data from the first locations via the communications network to the central computing unit.

4. The method of claim 1 wherein the communications network comprises a telephone line and further comprising allowing a homeowner use a telephone by overriding the transfer of data over the telephone line to the central computing unit.

5. (Amended) The method of claim 1 further comprising comparing an operating parameter of the plurality of grinder pump stations over time to determine the maintenance warnings.

6. (Amended) The method of claim 1 further comprising comparing an operating parameter of the plurality of grinder pump stations to a predetermined criteria to determine the maintenance warnings.

7. (Amended) An alarm panel for a grinder pump station, said alarm panel comprising:

a processor for monitoring the grinder pump; and

a modem board connectable to said processor, at least one of said processor and said modem board comprising an override to allow use of a telephone by a homeowner over use of the telephone line by said modem board during transmission of data from the processor to a central computing unit.

8. The alarm panel of claim 7 further comprising a pressure transducer connectable to a sensing tube of the grinder pump, and wherein said pressure transducer is operable to allow operation of the grinder pump to pump fluid from a tank so that the fluid level goes below the bottom of the sensing tube.

9. The alarm panel of claim 8 wherein the level of the fluid is normally maintained above the bottom of the sensing tube and fluid is periodically pumped from the tank so that a fluid level goes below the bottom of the sensing tube.

10. A modular alarm panel for a grinder pump station, the modular alarm panel comprising:

a processor for monitoring the grinder pump; and

wherein said processor is connectable to a power loss high level alarm module, a modem board, a pressure transducer, and a generator receptacle.

11. (Amended) The modular alarm panel of claims 10 further comprising a modem board and wherein at least one of said processor and said modem board comprises an override to allow use of a telephone by a homeowner over use of the telephone line during transmission of data to a central computing unit.

12. The modular alarm panel of claims 10 further comprising a pressure transducer connectable to a sensing tube of the grinder pump, and wherein said pressure transducer is operable to allow operation of the grinder pump to pump fluid from a tank so that a fluid level goes below a bottom of the sensing tube.

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cont.
13. The modular alarm panel of claim 12 wherein the level of the fluid is normally maintained above the bottom of the sensing tube and fluid is periodically pumped from the tank so that the fluid level goes below the bottom of the sensing tube.

14. A method for recharging a sensing tube for use in measuring a level of a fluid in a receptacle, the method comprising:
 permitting the level of the fluid in the receptacle to go below the bottom of the sensing tube.

15. The method of claim 14 wherein the level of the fluid is normally maintained above the bottom of the sensing tube and the permitting comprises periodically allowing the fluid level to go below the bottom of the sensing tube.

16. The method of claim 14 wherein the fluid is wastewater and the receptacle is a tank.

17. The method of claim 16 wherein the permitting the level of the wastewater to go below the bottom of the sensing tube comprises operating a grinder pump to pump wastewater from the tank so that the wastewater level goes below the bottom of the sensing tube.

18. A method for transmitting information over a high voltage alternating current line, the method comprising:

receiving data at a first location;

modulating the voltage of an alternating current line at the first location to generate a series of pulses corresponding to the information;

detecting the series of pulses in the high voltage line at a second location different from the first location; and

determining the data at a second location based on the series of pulses.

19. The method of claim 18 wherein the modulating comprises amplitude modulation.

20. The method of claim 18 wherein the receiving the data at a first location comprises receiving data regarding operation of a grinder pump, and determining the data at the second location comprises determining the data at an alarm panel.

21. The method of claim 20 further comprising transmitting said data at the second location over a communications network to a central computing unit.